REMARKS

Claim Rejections – 35 U.S.C. § 103

The Office Action rejected claims 1, 2, 4, 8, 9, 11, 22, and 23 under 35 U.S.C. 103(a) as being unpatentable over Koshoubo et al. (US 5,966,111) in view of Scheffer et al. '485. The Office Action also rejected claims 5-7, and 12-14 under 35 U.S.C. 103(a) as being unpatentable over Koshoubo et al. (US 5,966,111) in view of Scheffer et al. '485 and further in view of Chang et al. (US 6,611,247).

In response to the rejections thereto, Applicants hereby otherwise traverse these rejections, and submit that claims 1-4, and 15-18 are novel and unobvious over Koshoubo et al., Scheffer et al. or any of the other cited references, taken alone or in combination, and thus should be allowed.

Applicant's arguments filed September 1st, 2006 have discussed the patentability of independent claims 1 and 8. In the current Office Action, the Examiner alleged such arguments are not persuasive and discussed respectively. For the purpose of clarifying the reasons on which the patentability of the present invention as set forth in independent claims 1 and 8 relies, Applicants respectfully would like to further discuss the previously submitted reasons as following:

1. "the Scheffer reference is not reasonably pertinent to the particular problem with which Applicants was concerned". In response to this reason, the Examiner contended in the current Office Action that "the reference applied in the rejection do not need to solve the same problem that the applicant's invention solves but rather only needs to read on the CLAIMED invention".

However, as previously argued, Applicants did not require that the cited references when combined and considered as a whole must solve the same problem that the present invention solves. On the contrary, the Applicants only asked for the Examiner to carry out the compulsory rules held in MPEP as "The Examiner must determine what is 'analogous prior art' for the purpose of analyzing the obviousness of the subject matter at issue ... 'In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned" (MPEP §2141.01(a)).

As also explained by CCPA:

> "In resolving the question of obviousness under 35 U.S.C. 103, we presume full knowledge by the inventor of all the prior art in the field of his endeavor. However, with regard to prior art outside the field of his endeavor, we only presume knowledge from those arts reasonably pertinent to the particular problem with which the inventor was involved. The rationale behind this rule precluding rejections based on combination of teachings of references from nonanalogous arts is the realization that an inventor could not possibly be aware of every teaching in every art" *In re* Wood, 599 F. 2d 1032, 202 USPQ 171, 174 (C.C.P.A 1979)

In addition, the Federal Circuit has clarified how to determine whether a reference is reasonably pertinent to the particular problem with which the inventor was involved. The Federal Circuit has stated that:

> "a reference is reasonably pertinent if ... it is one which , because of the matter with which it deals, logically would have commended itself to the inventor's attention in considering his problem ... If a reference disclosure has the same

> purpose as the claimed invention, the reference relates to the same problem ... If it is directed to a different purpose, the inventor would accordingly have has less motivation or occasion to consider it" *In re* Clay, 966 F.2d 656, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992)

Accordingly, as the Examiner alleged that in rejecting the present invention, the prior art reference did not need to solve the same problem, the Examiner seems agree with that the cited prior art references, when combined and considered as a whole, does not have the same purpose as the claimed invention, or relates to the same problem. Therefore, if the cited references, i.e., Koshoubo et al., Scheffer et al. are in nonalagous art, that is not in the field of applicant's endeavor and is not reasonably pertinent to the particular problem with which the inventor was concerned, *prima facie* obviousness rejection would not have been properly made.

The Examiner also contended that "The specification is NOT the measure of invention ... limitations contained therein can not be read into the claims for the purpose of avoiding the prior art" and "The claims only pertain to applying voltages to a transmission line". Applicants respectfully disagree. Applicants submit that in accordance with the above cited case law, there is never required that cited references must be in the field of the claims. What is required is the reference must either be in the field of **applicant's** endeavor or, if not, then be reasonably pertinent to **the particular problem with which the inventor was concerned.** Applicants submit that in accordance with the instruction as set forth in MPEP §608.01(c), "A brief summary of the invention indicating its nature and substance, which may include a statement of the **object of the invention**, ... if properly written to set out the exact nature, operation, and **purpose of the invention**, will be of material assistance in aiding ready understanding of the

patent in future searches", and in accordance with the instruction as set forth in 37CFR 1.75, "where the nature of the case admits, as in the case of an improvement, any independent claims should contain in the following order: (1) A preamble comprising a general description of all the elements or steps of the claimed combination which are conventional or known, (2) A phrase such as wherein the improvement comprises, and (3) Those elements, steps, and/or relationships which constitute that portion of the claimed combination which the applicant considers as the new or improved portion". As such, Applicant's endeavor, purpose of the invention, or the problem the invention solves, are not required to be presented in the claims. On the contrary, such items are instructed to be illustrated in the disclosure including the Brief Summary of the Invention section. Accordingly, the specification should be considered when determining whether or not the cited references are in analogous art.

2. "the Scheffer still fails to teach or suggest the feature of 'finding a first voltage, a second voltage, a first voltage maintenance period and a second voltage maintenance period according to the initial voltage and the final voltage' as claimed in claim 1, and the feature of 'first period of time and the second period time are configured according to an initial voltage of the signal and a final voltage which is desired to be obtained on the transmission line' as claimed in amended claim 8. More particularly, the Scheffer still fails to teach or suggest the feature of considering the final voltage which is desired to be obtained on the transmission line to determine the first voltage, second voltage, first voltage maintenance period and second voltage maintenance period in the present invention".

Addressing this argument, the Examiner contended in the current Office Action, since "the Examiner interprets that S+D is a first voltage, S-D is a second voltage, f is a first voltage maintenance period and 1-f is a second voltage maintenance period, where f corresponds to the first S+D voltage and 1-f corresponds to the S-D voltage, and that these values are found corresponding to the gray level voltage, i.e. final voltage, needed to be achieved from the initial voltage", therefore Scheffer does teach this feature".

Applicants respectfully disagree. As primarily held as the basic considerations, which apply to obviousness rejection, the claimed invention must be considered as a whole. Even though those values, i.e., S+D, S-D, f, 1-f are interpreted as corresponding to the gray level voltage, i.e. final voltage, according to Scheffer, the final voltage can be obtained from those values, while such a process is not reversible. In other words, as taught by Scheffer, the final voltage could be possibly found according to above-mentioned values, while those values could not be found according to the final voltage to which they correspond. In this manner, the aforementioned limitation is submitted to be not anticipated by Scheffer in order to set up a *prima facie* obviousness case.

3. "the proposed modification in the Office Action has basically destroyed the principle of operation of the Koshoubu".

Addressing this argument, the Examiner contended that "the examiner was only using the Scheffer reference as a teaching that could be applied to the Koshoubu reference", and "when combined, the selection period taught by Koshoubu may be made to stay the same while the periods with which the two pulses are applied can be made to change within the selection period

by using the teaching of Scheffer, therefore allowing the device to maintain its principle operation". The Examiner further cited *In re* Keller, and highlighted that "obviousness cannot be shown by attacking the references individually where, as here the rejections are based on the combination of the reference".

Responsive thereto, Applicants submit that Applicants did not argue about whether these two references are combinable or not. On the contrary, Applicants respectfully argued that "the proposed modification in the Office Action has basically destroyed the principle of operation of the Koshoubu", thus **suggestion or motivation to modify the references could not be found** (MPEP §2143.01). Applicants would like to have the Examiner pay equal attention on the comments following the In re Keller case law as presented in MPEP §2145 III, that is "[I]t is not necessary that the inventions of the references be physically combinable to render obvious the invention under review ..., **[H]owever, the claimed combination cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose.** See MPEP §2143.01".

Finally, Applicants would like to restate that even the above two cited references would not have been motivated to be combined, and while trying to do so, the combination still lack claimed limitation, and thus the present invention as set forth in independent claims 1, and 8, and their dependent claims 2, 4-7, 9, 11-14, 22, and 23 are patentable over Koshoubo et al., Scheffer et al. or any of the other cited references, taken alone or in combination, and thus should be allowed.

CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1, 2, 4-9, 11-14, 22, and 23 are in proper condition for allowance and an action to such effect is earnestly solicited. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,
J.C. PATENTS

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Jiawei Huang
Registration No. 43,330

4 Venture, Suite 250
Irvine, CA 92618
Tel.: (949) 660-0761
Fax: (949)-660-0809